



What is HIV/AIDS?

HIV/AIDS is an infectious disease caused by a virus that progressively destroys the body's immune system. HIV slowly breaks down the body's immune system, leading to an advanced stage of HIV disease known as AIDS. AIDS is diagnosed when a person has a T-cell count of fewer than 200 or a specific type of illness as a result of HIV infection.

Who is at risk for HIV/AIDS?

Anyone can get HIV/AIDS. Behaviors that put people at risk include having unprotected sex and using injection drugs. Infants who are born to an infected mother are also at risk for contracting HIV/AIDS.

What are the symptoms of HIV/AIDS?

Children with HIV or AIDS may show few signs or symptoms. Possible symptoms are failure to grow and develop well, enlarged lymph nodes, enlarged liver, enlarged spleen, swelling of salivary glands and frequent infections, including pneumonia, diarrhea and thrush (a yeast infection on the surfaces of the mouth). Adults with HIV or AIDS may experience rapid weight loss; dry cough; recurring fever or excessive night sweats; extreme and unexplained fatigue; swollen lymph glands in the armpits, groin or neck; diarrhea that lasts for more than a week; white spots or unusual blemishes on or under the skin or inside the mouth, nose or eyelids; or memory loss, depression and other neurological disorders.

How soon do symptoms appear?

People who have HIV can stay healthy for a long time. Eventually, however, the immune system becomes so weak that the infected person becomes ill. If the infection is acquired from infected mothers before or during birth, infants typically develop signs or symptoms between 12 months and 18 months of age, but may remain without symptoms for five years or more.

How is HIV/AIDS spread?

HIV can be transmitted through four body fluids (blood, semen, vaginal fluid or breast milk). Transmission occurs through contact with mucous membranes or openings in the skin with infected blood and body fluids. Examples of the methods of transmission include contaminated needles or sharp instruments, unprotected sexual contact (unprotected oral, vaginal or anal sex), and mother-to-infant transmission before or during birth and through breastfeeding. HIV is not spread in the kind of contact that occurs in child-care and school settings, such as typical classroom activities, or from surfaces touched by infected people. It is not spread through saliva, tears, stool, urine, kissing or holding hands, coughing, or sneezing, or by sharing bathrooms.

When and for how long is a person able to spread the disease?

Infected individuals can transmit the virus throughout their lifetimes. A person can transmit HIV to someone else by having unsafe sex or sharing needles, even when the amount of virus is not detectable.

How is a person diagnosed?

HIV tests look for HIV antibodies and not the virus itself. A person's body responds to HIV by developing antibodies to help fight off the virus. It can take up to three months (in rare cases, six months) to develop HIV antibodies after infection.

What is the treatment?

Although there is no cure for HIV/AIDS, there are drugs that slow down the damage HIV does to the immune system. When they are effective, these drugs can reduce the amount of HIV in a person's body. The drugs do not work for everyone or totally rid the body of the virus. The virus continues to actively make copies of itself, but it does this work hidden in certain areas of the body until a person's immune system can no longer fight them as effectively.

- **Antiretroviral medicines.** These powerful medicines control the virus and slow progression of HIV infection, but they do not cure it. You need to take these medicines exactly as your doctor prescribes.
- **HAART.** This combination of medicines is called highly active antiretroviral therapy (HAART). How many pills you will need to take and how often you will take them depend on which medicines your doctor chooses for you. Remember, each HAART regimen is tailored to each individual patient. There is no one best regimen. HAART may cause some side effects. You and your doctor should discuss potential side effects so that you will know if they occur. If you experience any side effects, even those that may seem minor, you should talk about them with your doctor.
- **Other medicines.** Your doctor also may prescribe other medicines for you, depending on your CD4 cell count. Always discuss any side effects with your doctor. Never change the way you are taking any of the medicines without first talking with your doctor. If you don't take your medicines the right way, they may not be as effective as they should be.
- **Treating other infections.** If your HIV infection gets worse and your CD4 cell count falls below 200, you are more likely to get other infections. Your doctor may prescribe medicines to prevent particular infections.

The most important thing you can do after you learn that you have HIV is to work closely with your doctor. Because HIV and HIV-related illnesses vary from person to person, your doctor will design a medical care plan specifically for you. To help your doctor make the best choices for you, you must tell your doctor about any side effects or symptoms you have.

Does past infection make a person immune?

No. Once a person is infected, the virus remains in the person throughout his or her lifetime. There is currently no cure for this disease.

Should children or others be excluded from day care, school, work or other activities if they have HIV/AIDS?

No. Children with HIV infection should not be excluded from school or day care for the protection of other children or staff. Children may be excluded if the child has fever or behavioral change, the child has weeping skin lesions that cannot be covered or bleeding problems, or if the child meets other exclusion criteria (i.e., the child needs more care than the facility is readily available to provide or because of risk of exposure to infections in the group care setting).

What can be done to prevent the spread of HIV/AIDS?

Eliminate high-risk behaviors (i.e., chose not to have sex, have safer sex by using condoms and dental dams, don't share needles). Standard precautions also should be followed when blood or blood-containing body fluids are handled. For blood and blood-containing substances, these are the same precautions described by the U.S. Occupational Safety and Health Administration (OSHA) as universal precautions:

- Wear disposable or utility gloves that can be sanitized after use.
- Absorb as much of the spill as possible with disposable materials; put the contaminated materials in a plastic bag with a secure tie.
- Clean contaminated surfaces with detergent, soap and water.
- Rinse with water.
- Sanitize the clean surface by wetting the entire surface with a spray application of freshly diluted domestic bleach (1/4-cup bleach in 1 gallon of water or 1 tablespoon to a quart) and leaving this solution in contact with the surface for at least two minutes.

Additional Information:

Additional information is available at www.ndhealth.gov/disease or by calling the North Dakota Department of Health at 800.472.2180.

This disease is a reportable condition. As mandated by North Dakota law, any incidence of this disease shall be reported to the North Dakota Department of Health.

Resources:

American Academy of Pediatrics. [Human Immunodeficiency Virus Infection]. In: Pickering LK, ed. *Red Book: 2003 Report of the Committee on Infectious Diseases*. 26th ed. Elk Grove Village, IL: American Academy of Pediatrics; 2003: 360-382.

Centers for Disease Control and Prevention. HIV/AIDS Prevention Questions and Answers: www.cdc.gov/hiv/resources/qa/print/qa5.htm.

